# **SA River Murray Flow Report**



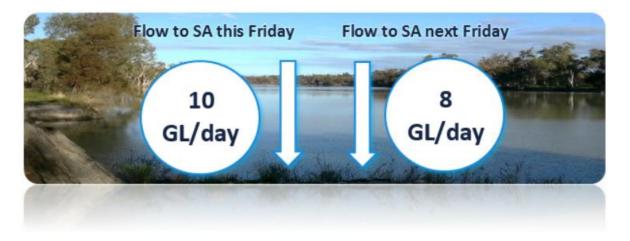


Report #22/2023

Issued 10:00 am 2 June 2023

This supersedes the previous Flow Report issued by the Department for Environment and Water (DEW) on 26 May 2023. The next Flow Report will be provided on Friday 9 June 2023.

#### Flow outlook



The flow at the South Australian border is approximately 10 GL/day and is forecast to decrease to around 8 GL/day over the coming week. The current flow at the border comprises:

- full June Entitlement Flow (3 GL/day);
- water for the environment;
- interstate trade adjustments; and
- Unregulated flow.

The flow over Lock 1 is approximately 11 GL/day and will decrease to around 8 GL/day over the coming week.

It is important to note that flow forecasts in this advice are based on the information available at the time of preparation. Advice may change as new gauging information becomes available or due to rainfall events or changed operations upstream.

#### **Current water levels**

Current water levels are updated daily and can be found at the following link: <a href="https://www.waterconnect.sa.gov.au/River-Murray/SitePages/Daily.aspx">https://www.waterconnect.sa.gov.au/River-Murray/SitePages/Daily.aspx</a>

# **Salinity**

Increased salinity levels are common during flood recessions. The Department is closely monitoring elevated salinity levels throughout the River Murray in South Australia. In general, salinity levels across the River Murray in SA for the week were at approximately 370-520 EC. It is understood that some irrigators have recorded higher salinity readings at isolated locations. These higher readings are more likely to be observed at the bottom of the water column.

Irrigators are encouraged to monitor the daily salinity levels provided by SA Water as part of their business operations.

PIRSA has provided salinity management advice for irrigators on its website: <a href="https://www.pir.sa.gov.au/emergencies">https://www.pir.sa.gov.au/emergencies</a> and recovery/storms and floods/river murray flood 2022

### **Upstream flows**

More information on upstream conditions and forecasts can be found in the Murray-Darling Basin Authority's *Weekly Flow Report* here: <a href="https://www.mdba.gov.au/water-management/regular-reports-murray-data-storages/weekly-reports">https://www.mdba.gov.au/water-management/regular-reports-murray-data-storages/weekly-reports</a>

### **Murray Mouth**

Dredging at the Murray Mouth continues to be suspended due to high flows scouring sand out of the mouth. Conditions are continuing to be monitored, Tide Ratios analysed, and fortnightly surveys performed in order to provide accurate information to assist in determining when dredging may recommence.

Dredging operations are still not required in the Murray Mouth due to the positive impact from the 2022-23 SA River Murray flood event that produced an adequate open channel through the volume of sand that was naturally pushed out to sea. However, it is anticipated that at some point dredging will be required to recommence to ensure that the Murray Mouth remains open.

A wider and deeper Murray Mouth will have positive environmental benefits following the flood through enabling better exchange of water between the ocean and the Murray estuary and Coorong.

### Barrage operations and water levels in the Lower Lakes

The water level in Lake Alexandrina is approximately 0.7 m AHD and Lake Albert is approximately 0.7 m AHD.

DEW and SA Water are currently working to maintain an average water level of 0.7 m AHD across Lake Alexandrina and Lake Albert until the end of June 2023.

Although this is the target, there will be times when the water levels can be higher or lower than the target. At these times the barrages will be operated to either raise or lower water levels as required. Water levels and barrage operations are monitored closely by the South Australian Government, Murray-Darling Basin Authority and Commonwealth Environmental Water Office.

Gate openings at the barrages can now be viewed on Water Data SA here: <a href="https://water.data.sa.gov.au/Data/Dashboard/75">https://water.data.sa.gov.au/Data/Dashboard/75</a>

Total daily flow releases from the barrages can also be found on Water Data SA here: <a href="https://water.data.sa.gov.au/Data/Dashboard/1">https://water.data.sa.gov.au/Data/Dashboard/1</a>

# **River Murray River Vessel Waste Disposal Stations**

As at 1 June 2023 all River Vessel Waste Disposal Stations (excluding Lock 3) are online and operational.

Additional minor repair works will be required across the stations over the next couple of months. This is expected to have a minimal impact on the operational status of the stations.

Murray Bridge is operational and may experience a short period of time where it is offline to facilitate a permanent repair to the power supply. Once the dates are confirmed DEW will ensure that the public is notified prior to the works commencing.

The Lock 3 River Vessel Waste Disposal Station has been out of commission since January 2020 due to a significant infrastructure failure. The nearest alternative waste facility is located at Waikerie. Normal boat waste (domestic or galley waste) can still be deposited at the Lock 3 facility at the present time.

You can report any River Vessel Waste Disposal Station issues on 1800 799 065.

If you have any questions, please contact the DEW Engagement Team on <u>DEW.WIOCommunications@sa.gov.au</u>

### Levee embankments

The Department is continuing to work with PIRSA and impacted landholders and trusts to stabilise and dewater the Lower Murray Reclaimed Irrigation Area (LMRIA) levee network. LiDAR flights and data have now been completed for all levees, and stability assessments and reports have been completed for government owned levees. Short-term stability works, where required, to enable dewatering have either commenced or are completed.

Early planning and revisiting of sites have started for the intermediate stabilisation of levees to support levee function and help protect levees from wind seiche and fluctuating river levels during normal river operations.

Once intermediate works are complete and the areas have dried out, a condition assessment will be undertaken to determine longer-term requirements.

Local Irrigation Trust members and contractors should take the necessary precautions when working on levees, particularly during periods of wet weather, as the integrity of levees cannot be guaranteed following the flood event. While flood recovery works are taking place, levee banks along the River Murray are closed to the public for recreational activities. This includes for walking, fishing and mooring of river vessels.

Questions related to dewatering and recovery of agricultural areas can be directed to the PIRSA Recovery Hotline on 1800 931 314.

More information on the stabilisation of levee banks in the LMRIA can be found on the DEW website at <a href="https://www.environment.sa.gov.au/topics/river-murray-floods/lower-murray-levee-banks">https://www.environment.sa.gov.au/topics/river-murray-floods/lower-murray-levee-banks</a>.

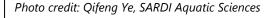
If you have any questions, contact the DEW Engagement Team on <u>DEW.WIOCommunications@sa.gov.au</u>

## **Environmental news – Something fishy in the Coorong**

Fish scientists from SARDI Aquatic Sciences were excited by recent survey results from the Coorong, where they recorded the highest diversity in the fish population at Parnka Point (Coorong) since monitoring began, some 15 years ago! Greenback flounder, yelloweye mullet, congolli, smallmouth hardyhead, river garfish and four species of gobies were detected. Fish populations are loving the low Coorong salinities.

This monitoring is funded by The Living Murray, a joint initiative of the New South Wales, Victorian, South Australian and Commonwealth Governments, coordinated by the Murray-Darling Basin Authority.







# **Water quality**

#### Algal blooms

It is reasonably common for algal blooms to be reported at this time of year in the Murray-Darling Basin and a number of red and amber alerts for blue-green algae have been issued by upstream authorities in recent weeks. They include:

- River Murray at Fort Courage (Amber alert)
- River Murray at Curlwaa (Amber alert)
- River Murray at Merbein (Amber alert)

While no algal-blooms are currently present within South Australia, people are advised to avoid contact with any obviously green water or scums if they are encountered as they may cause skin irritations in some people.

South Australian authorities closely monitor the situation upstream and SA Water increases sampling whenever a water quality event is detected to allow for timely action. SA Water, SA Health and DEW monitor the occurrence of blue-green

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algal blooms in South Australia. SA Water uses the water quality data to continually adjust operations to minimise impacts to water treatment plants and other users located along the River Murray.

Water quality alerts in South Australia can be found on the SA Health website:

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More information on current alerts upstream can be found on the WaterNSW website here: <a href="https://www.waternsw.com.au/water-services/water-quality/algae-alerts">https://www.waternsw.com.au/water-services/water-quality/algae-alerts</a>

### **Further information**

2022-23 River Murray Flood event <a href="http://www.sa.gov.au/topics/emergencies-and-safety/river-murray-flood">http://www.sa.gov.au/topics/emergencies-and-safety/river-murray-flood</a>.

2022-23 Flood **recovery** <a href="https://www.sa.gov.au/topics/emergencies-and-safety/river-murray-">https://www.sa.gov.au/topics/emergencies-and-safety/river-murray-</a>

flood/recovery

Water quality alerts in SA

https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health

+internet/public+health/water+quality/water+quality+alerts

NSW **fish deaths** https://www.dpi.nsw.gov.au/fishing/habitat/threats/fish-kills

NSW algal alerts <a href="https://www.waternsw.com.au/water-services/water-quality/algae-alerts">https://www.waternsw.com.au/water-services/water-quality/algae-alerts</a>

**Real-time water data** at sites in SA <a href="https://water.data.sa.gov.au/">https://water.data.sa.gov.au/</a>

Current daily water levels https://www.waterconnect.sa.gov.au/River-Murray/SitePages/Daily.aspx

Daily flow and level information at key SA Water sites on the River Murray

https://www.sawater.com.au/water-and-the-environment/south-australias-

water-sources/river-sources/river-reports-daily-flow

Daily **salinity** information in SA <a href="https://www.sawater.com.au/water-and-the-environment/south-australias-">https://www.sawater.com.au/water-and-the-environment/south-australias-</a>

water-sources/river-sources/river-reports-daily-salinity

Real time information throughout the River Murray system

https://riverdata.mdba.gov.au/system-view

Whole River Murray System updates <a href="https://www.mdba.gov.au/water-management/regular-reports-murray-data-">https://www.mdba.gov.au/water-management/regular-reports-murray-data-</a>

storages/weekly-reports

Marine safety in SA <a href="https://marinesafety.sa.gov.au/">https://marinesafety.sa.gov.au/</a>

Victorian rainfall and river conditions <a href="http://www.bom.gov.au/vic/flood/index.shtml">http://www.bom.gov.au/vic/flood/index.shtml</a>

**NSW** rainfall and river conditions <a href="http://www.bom.gov.au/nsw/flood/">http://www.bom.gov.au/nsw/flood/</a>

Climate outlooks <a href="http://www.bom.gov.au/climate/ahead/outlooks/">http://www.bom.gov.au/climate/ahead/outlooks/</a>

Climate drivers <a href="http://www.bom.gov.au/climate/enso/">http://www.bom.gov.au/climate/enso/</a>

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